

In the claims:

1. (Original) Device for converting an AC voltage from the mains electricity supply into a DC voltage of predetermined level (and waveform), comprising:
a rectifier circuit for connecting to the mains electricity supply;
a switching circuit connected to the rectifier circuit;
a main transformer connected to the switching circuit; and
an auxiliary transformer which is connected to the switching circuit and the secondary winding of which is coupled to the secondary winding of the main transformer such that the current through the switching circuit and the main transformer is limited to a predetermined value.

2. (Original) Device as claimed in claim 1, wherein a filter circuit is connected between the rectifier circuit and the switching circuit.

3. (Original) Device as claimed in claim 2, wherein the filter circuit comprises a number of diodes.

4-12. Cancelled.

13. (New) Device as claimed in claim 2, wherein the filter circuit comprises at least one capacitor and one self-induction element.

14. (New) Device as claimed in claim 3, wherein the filter circuit comprises at least one capacitor and one self-induction element.

15. (New) Device as claimed in claim 1, wherein the switching circuit comprises a power transistor in common-base configuration.

16. (New) Device as claimed in claim 2, wherein the switching circuit comprises a power transistor in common-base configuration.

17. (New) Device as claimed in claim 3, wherein the switching circuit comprises a power transistor in common-base configuration.

18. (New) Device as claimed in claim 13, wherein the switching circuit

comprises a power transistor in common-base configuration.

19. (New) Device as claimed in claim 14, wherein the switching circuit comprises a power transistor in common-base configuration.

20. (New) Device as claimed in claim 15, wherein the switching circuit comprises a DIAC.

21. (New) Device as claimed in claim 16, wherein the switching circuit comprises a DIAC.

22. (New) Device as claimed in claim 17, wherein the switching circuit comprises a DIAC.

23. (New) Device as claimed in claim 18, wherein the switching circuit comprises a DIAC.

24. (New) Device as claimed in claim 19, wherein the switching circuit comprises a DIAC.

25. (New) Device as claimed in claim 15, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

26. (New) Device as claimed in claim 16, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

27. (New) Device as claimed in claim 17, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

28. (New) Device as claimed in claim 18, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

29. (New) Device as claimed in claim 19, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

30. (New) Device as claimed in claim 20, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

31. (New) Device as claimed in claim 21, wherein the auxiliary transformer is

connected to the collector or emitter of the power transistor.

32. (New) Device as claimed in claim 22, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

33. (New) Device as claimed in claim 23, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

34. (New) Device as claimed in claim 24, wherein the auxiliary transformer is connected to the collector or emitter of the power transistor.

35. (New) Device as claimed in claim 1, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

36. (New) Device as claimed in claim 30, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

37. (New) Device as claimed in claim 31, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

38. (New) Device as claimed in claim 32, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

39. (New) Device as claimed in claim 33, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

40. (New) Device as claimed in claim 34, wherein a diode is connected between the connecting terminals of the secondary windings of the auxiliary transistor.

41. (New) Device as claimed in claim 36, wherein a resistor is connected between the base and the collector or emitter of the power transistor.

42. (New) Device as claimed in claim 37, wherein a resistor is connected between the base and the collector or emitter of the power transistor.

43. (New) Device as claimed in claim 38, wherein a resistor is connected between the base and the collector or emitter of the power transistor.

44. (New) Device as claimed in claim 39, wherein a resistor is connected

between the base and the collector or emitter of the power transistor.

45. (New) Device as claimed in claim 40, wherein a resistor is connected between the base and the collector or emitter of the power transistor.

46. (New) Device as claimed in claim 41, wherein a resistor with temperature-dependent value is connected between the base of the power transistor on the one hand and the collector or emitter on the other.

47. (New) Device as claimed in claim 42, wherein a resistor with temperature-dependent value is connected between the base of the power transistor on the one hand and the collector or emitter on the other.

48. (New) Device as claimed in claim 43, wherein a resistor with temperature-dependent value is connected between the base of the power transistor on the one hand and the collector or emitter on the other.

49. (New) Device as claimed in claim 44, wherein a resistor with temperature-dependent value is connected between the base of the power transistor on the one hand and the collector or emitter on the other.

50. (New) Device as claimed in claim 45, wherein a resistor with temperature-dependent value is connected between the base of the power transistor on the one hand and the collector or emitter on the other.